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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,445	09/28/2001	Katsuya Anzai	YKI-0077	5332

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EXAMINER

MAGEE, THOMAS J

ART UNIT	PAPER NUMBER
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2811

DATE MAILED: 07/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 09/966,445	Applicant(s) ANZAI, KATSUYA	
	Examiner Thomas J. Magee	Art Unit 2811	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☐ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \*   c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other:  |

## **DETAILED ACTION**

### ***Claim Rejections – 35 U.S.C. 103***

1. The following is a quotation of 35 U.S.C.103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi et al. (US 5,897,328) in view of Arai (US 6,369,507 B1), and Takayama et al. (US 5,986,632).

3. Regarding Claims 1 and 4, Yamauchi et al. disclose (Col. 8, lines 62 – 67; Col.9, lines 1 – 30) an electroluminescent device with an organic layer element where the element is connected to a thin film transistor through a wiring layer. The contact position of metal (114) to top of device region with elements, 105,106, and 107 is at a distance from the contact to the organic layer element (115) (See Figure 3d). In similar fashion, Arai discloses the use of an organic electroluminescent device with a switching device (transistor) (Col. 19, lines 57 – 64) and encompassing electrodes. Yamauchi et al. do not explicitly disclose the use of a power supply or driver unit, although it would be obvious that power and a driver circuit would be used for active operation of the system. However, Takayama et al. disclose control and driver circuits for thin film transistors with

associated light emissive elements (Col.7, lines 4 – 32; Col. 8, lines 1 – 16). Further, the art is replete with disclosures of power supply and driver/control circuits for electroluminescent display devices. Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art to combine Arai and Takayama et al. with Yamauchi et al. to obtain a power and drive control circuit for controlling the element to be driven (organic layer).

4. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi et al. in view of Arai and Takayama et al., as applied to Claims 1 and 4 above and further in view of Yamazaki et al. (US 6,326,249 B1).

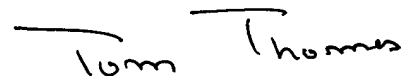
5. Regarding Claims 2 and 3, Yamauchi et al. disclose (Col. 7, lines 58 – 67; Col. 8, lines 1 – 26; Col 9, lines 5 – 9) a thin film transistor for controlling power to an emissive (organic) element located at a distance from the transistor, with the emissive element (115) positioned between two electrodes (109,116) (See Figure 3d). Further, a part of the insulating region is removed to form contact holes for interconnecting transistor and organic element. The emissive element above the first electrode is covered by another electrode, followed by an SiO<sub>2</sub> protective layer (117) which is also above the contact hole region. Yamauchi et al. do not specifically disclose the use of a flattening layer. However, Yamazaki et al. disclose a method for flattening (Col. 28, lines 29 – 37) an insulating film over an electrode of an electroluminescent display device (Col. 30, lines 8 - 11). In like fashion, a layer of thin film material (109) (first electrode) can be “flattened”

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before deposition of the organic element (115). Hence, the flattening procedure disclosed by Yamazaki et al. can obviously be utilized in flattening both layer 117 and layer 109. Therefore, it would have been obvious at the time of the invention to one of ordinary skill in the art to combine Arai, Takayama et al., and Yamazaki et al. with Yamauchi et al. to obtain flattened layers above the contact hole region and first electrode.

### ***Conclusions***

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to **Thomas Magee**, whose telephone number is **(703) 305 5396**. The Examiner can normally be reached on Monday through Friday from 8:30AM to 5:00PM (EST). If attempts to reach the Examiner by telephone are unsuccessful, the examiner's supervisor, **Tom Thomas**, can be reached on **(703) 308-2772**. The fax number for the organization where this application or proceeding is assigned is **(703) 308-7722**.



TOM THOMAS  
SUPERVISORY PATENT EXAMINER  
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